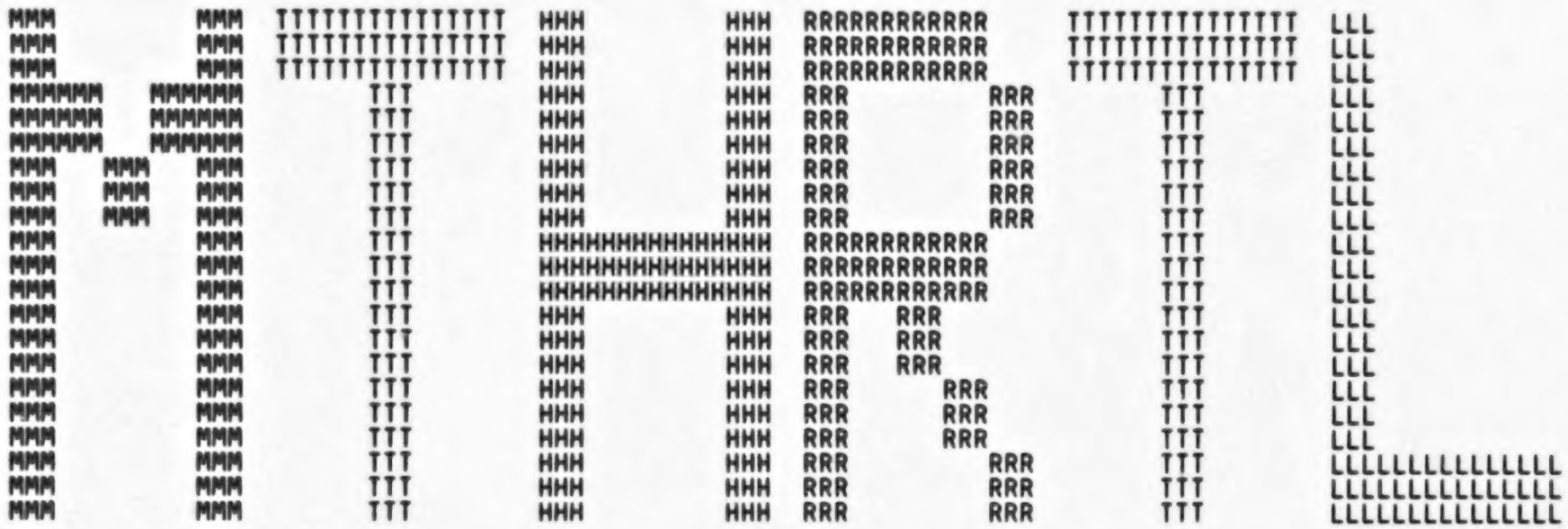
MMM MMM TTTTTTTTTTTTTTT HHH HHH RRRRRRRRRRR TTTTTTTTTTTTTTT LLL
MMM MMM TTTTTTTTTTTTTTT HHH HHH RRRRRRRRRRR TTTTTTTTTTTTTTT LLL
MMM MMM TTTTTTTTTTTTTTT HHH HHH RRRRRRRRRRR TTTTTTTTTTTTTTT LLL
MMMMMM MMMMMM TTT HHH HHH RRR RRR TTT LLL
MMMMMM MMMMMM TTT HHH HHH RRR RRR TTT LLL
MMMMMM MMMMMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM MMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM MMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM MMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM TTT HHHHHHHHHHHHHHH RRRRRRRRRR TTT LLL
MMM MMM TTT HHHHHHHHHHHHHHH RRRRRRRRRR TTT LLL
MMM MMM TTT HHHHHHHHHHHHHHH RRRRRRRRRR TTT LLL
MMM MMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM TTT HHH HHH RRR RRR TTT LLL
MMM MMM TTT HHH HHH RRR RRR TTT LLLLLLLLLLLLLLL
MMM MMM TTT HHH HHH RRR RRR TTT LLLLLLLLLLLLLLL
MMM MMM TTT HHH HHH RRR RRR TTT LLLLLLLLLLLLLLL

FILEID**MTHIIGNNT

```
MM      MM  TTTTTTTTTT  HH      HH    IIIIII      IIIIII      GGGGGGGG  NN      NN  NN      NN  TTTTTTTTTT
MM      MM  TTTTTTTTTT  HH      HH    IIIIII      IIIIII      GGGGGGGG  NN      NN  NN      NN  TTTTTTTTTT
MMMM  MMMM      TT      HH      HH      II          II      GG          NN      NN  NN      NN      TT
MMMM  MMMM      TT      HH      HH      II          II      GG          NN      NN  NN      NN      TT
MM  MM  MM      TT      HH      HH      II          II      GG          NNNN    NN  NNNN    NN      TT
MM  MM  MM      TT      HH      HH      II          II      GG          NNNN    NN  NNNN    NN      TT
MM      MM      TT      HHHHHHHHHH      II          II      GG          NN  NN  NN  NN  NN  NN      TT
MM      MM      TT      HHHHHHHHHH      II          II      GG          NN  NN  NN  NN  NN  NN      TT
MM      MM      TT      HH      HH      II          II      GG  GGGGGG  NN    NNNN  NN    NNNN      TT
MM      MM      TT      HH      HH      II          II      GG  GGGGGG  NN    NNNN  NN    NNNN      TT
MM      MM      TT      HH      HH      II          II      GG      GG  NN      NN  NN      NN      TT      ....
MM      MM      TT      HH      HH      II          II      GG      GG  NN      NN  NN      NN      TT      ....
MM      MM      TT      HH      HH    IIIIII      IIIIII      GGGGGG    NN      NN  NN      NN      TT      ....
MM      MM      TT      HH      HH    IIIIII      IIIIII      GGGGGG    NN      NN  NN      NN      TT      ....

LL              IIIIII      SSSSSSSS
LL              IIIIII      SSSSSSSS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II      SS
LL                II        SSSSSS
LL                II        SSSSSS
LL                II              SS
LL                II              SS
LL                II              SS
LL                II              SS
LLLLLLLLLL      IIIIII    SSSSSSSS
LLLLLLLLLL      IIIIII    SSSSSSSS
```

Table of contents

```
0000     1          .TITLE  MTH$IIGNNT - Nearest Integer
0000     2          .IDENT  /1-002/         ; File: MTHIIGNNT.MAR
0000     3
0000     4 ;
0000     5 ;*****************************************************************************
0000     6 ;*                                                                           *
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0000    24 ;*                                                                           *
0000    25 ;*                                                                           *
0000    26 ;*****************************************************************************
0000    27 ;
0000    28
0000    29 ;
0000    30 ; FACILITY: MATH LIBRARY
0000    31 ;++
0000    32 ; ABSTRACT:
0000    33 ;
0000    34 ;       Return nearest integer of a G REAL*8 to a INTEGER*2.
0000    35 ;
0000    36 ;--
0000    37 ;
0000    38 ; VERSION: 1
0000    39 ;
0000    40 ; HISTORY:
0000    41 ;
0000    42 ; AUTHOR:
0000    43 ;       Steven B. Lionel, 05-Feb-79: Version 1
0000    44 ;
0000    45 ; MODIFIED BY:
0000    46 ;
0000    47 ;
0000    48 ;
```

```
0000     50          .SBTTL  HISTORY          ; Detailed Current Edit History
0000     51
0000     52
0000     53 ; Edit History for Version 1 of MTH$IIGNNT
0000     54 ;
0000     55 ; 1-001 - Original.  SBL 05-Feb-79
0000     56 ; 1-002 - Use CVTRGL.  SBL 21-Aug-1979
```

```
                        .SBTTL  DECLARATIONS

;
; INCLUDE FILES:
;

;
; EXTERNAL SYMBOLS:
;

;
; MACROS:
;

;
; PSECT DECLARATIONS:
;
00000000                .PSECT  _MTH$CODE       PIC, SHR, LONG, EXE, NOWRT

;
; EQUATED SYMBOLS:
;

;
; OWN STORAGE:
;
```

```
                                        .SBTTL  MTH$IIGNNT - return nearest integer as INTEGER*2

                                ;++
                                ; FUNCTIONAL DESCRIPTION:
                                ;
                                ; Returns the nearest integer (rounded away from zero) of a G
                                ; REAL*8 to a INTEGER*2 as a function value.
                                ;
                                ; CALLING SEQUENCE:
                                ;
                                ;       nearest_int.ww.v = MTH$IIGNNT (arg.rg.r)
                                ;
                                ; INPUT PARAMETERS:
00000004                        ;       arg = 4         ; G floating argument
                                ;
                                ; IMPLICIT INPUTS:
                                ;       NONE
                                ;
                                ; OUTPUT PARAMETERS:
                                ;       NONE
                                ;
                                ; IMPLICIT OUTPUTS:
                                ;       NONE
                                ;
                                ; FUNCTION VALUE:
                                ;       nearest_integer - The integer nearest to arg, rounded
                                ;                         away from zero.
                                ;
                                ; SIDE EFFECTS:
                                ;       Reserved operand, Integer overflow exceptions.
                                ;
                                ;--


                        4000    0000    .ENTRY  MTH$IIGNNT,     ^M<IV>
50    04 BC             4BFD    0002    CVTRGL  @arg(AP), R0            ; R0 = rounded arg
   50    50               F7    0007    CVTLW   R0, R0                  ; R0 = word result
                            04  000A    RET
                                000B
                                000B
                                000B    .END
```

```
ARG             = 00000004
MTH$IIGNNT        00000000 RG    01
```

Psect synopsis

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
_MTH$CODE	0000000B (11.)	01 (1.)	PIC USR CON REL LCL SHR EXE RD NOWRT NOVEC LONG

Performance indicators

Phase	Page faults	CPU Time	Elapsed Time
Initialization	31	00:00:00.09	00:00:01.29
Command processing	147	00:00:00.60	00:00:03.92
Pass 1	77	00:00:00.39	00:00:02.34
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	38	00:00:00.29	00:00:01.32
Symbol table output	1	00:00:00.01	00:00:00.02
Psect synopsis output	2	00:00:00.02	00:00:00.19
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	298	00:00:01.41	00:00:09.09

```
The working set limit was 750 pages.
1215 bytes (3 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 2 non-local and 0 local symbols.
126 source lines were read in Pass 1, producing 10 object records in Pass 2.
0 pages of virtual memory were used to define 0 macros.
```

Macro library statistics

Macro library name	Macros defined
_255DUA28:[SYSLIB]STARLET.MLB;2	0

```
0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS$:MTHIIGNNT/OBJ=OBJ$:MTHIIGNNT MSRC$:MTHIIGNNT/UPDATE=(ENH$:MTHIIGNNT)
```